

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled)

2. (canceled)

3. (currently amended) A method of diagnosing ~~precancerous Barrett's esophageal~~ condition of ~~esophageal mucosa~~ in a patient comprising the steps of:

a) administering to said patient an appropriate amount of at least one signature carbohydrate, said patient not having ulcerative disease of the gastrointestinal (GI) tract nor bleeding therefrom;

b) collecting urine voided by said patient during a suitable time period after the administration of said at least one signature carbohydrate;

c) measuring levels of said at least one signature carbohydrate present in the urine collected in step b); and

d) comparing the urine levels of said at least one signature carbohydrate in said patient with a control urine sample, wherein an increase in the urine levels of said at least one carbohydrate in said patient is indicative of ~~the precancerous Barrett's esophageal~~ condition of ~~esophageal mucosa~~ in said patient.

4. (original) The method of claim 3, wherein said signature carbohydrate is at least one of the group of mannitol and sucrose.

5. (canceled)

6. (previously added) The method of claim 3, wherein said urine is collected over a 24 hour period.

7. (previously added) The method of claim 3, further comprising the steps of:

e) obtaining a tissue sample from the esophageal mucosa of said patient;

f) examining tight junction (TJ) leakiness of said tissue sample; and

g) comparing the TJ leakiness of said tissue sample from said patient with that from a control tissue sample, wherein an increase in the TJ leakiness of said tissue sample from said patient is indicative of the precancerous Barrett's esophageal condition of esophageal mucosa in said patient.

8. (previously added) The method of claim 7, wherein said TJ leakiness is correlated with altered expression levels of a protein.

9. (previously added) The method of claim 7, wherein said TJ leakiness is correlated with reduced phosphorylation state of occludin.

10. (canceled)

11. (canceled)

12. (canceled)